

ENVIRONMENTAL ASSESSMENT
AND
REGULATORY IMPACT REVIEW/INITIAL REGULATORY FLEXIBILITY ANALYSIS
FOR AMENDMENT 16
TO THE FISHERY MANAGEMENT PLAN FOR
GROUNDFISH OF THE GULF OF ALASKA
AND AMENDMENT 11a
TO THE FISHERY MANAGEMENT PLAN FOR
GROUNDFISH OF THE BERING SEA AND ALEUTIAN ISLANDS
(Including Changes to the FMPs and Regulations)

APPROVED BY
THE NORTH PACIFIC FISHERY MANAGEMENT COUNCIL
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1.0 INTRODUCTION

The domestic and foreign groundfish fishery in the fishery conservation zone (3-200 miles offshore) of the Gulf of Alaska is managed under the Fishery Management Plan for Groundfish of the Gulf of Alaska (FMP). The FMP was developed by the North Pacific Fishery Management Council (Council) under the Magnuson Fishery Conservation and Management Act (Magnuson Act). It was approved by the Assistant Administrator for Fisheries, NOAA, (Assistant Administrator) and implemented December 11, 1978 (43 FR 52709, November 14, 1978). Amendments 1-11 and 13-15 to the FMP have been approved by the Assistant Administrator. Amendment 12 was adopted initially by the Council at its July and December, 1982 meetings but was later rescinded by the Council at its September, 1984 meeting without having been submitted formally for Secretarial review.

The domestic and foreign groundfish fishery in the fishery conservation zone (3-200 miles offshore) of the Bering Sea and Aleutian Islands is managed under the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands. The FMP was developed by the Council under the Magnuson Act and approved by the Assistant Administrator and implemented January 1, 1982. Amendments 1-4 and 7-10 to the FMP have been approved by the Assistant Administrator. Amendment 5 was withdrawn and Amendment 6 was disapproved.

At its March 18-20, 1987, meeting, the Council reviewed the status of the two FMPs and certain problems that have been identified, either through experience gained from nine years of fishery management or through situations unforeseen as the domestic fishery has developed. It received recommendations from the PT, the Advisory Panel (AP), and the Scientific and Statistical Committee (SSC) on alternative management measures that could be adopted, as Amendment 16 to the FMP, to resolve the problems. The Council adopted an Amendment 16 "public hearing" package for consideration by the public, the fishing industry, and management agencies that analyzes the biological, ecological, and socioeconomic effects of these management measures. At its May 20-22, 1987 meeting, the Council chose to adopt the status quo alternative on many of the proposed measures, thereby, deleting all but two of these measures from Amendment 16. At its September 23-25, 1987 meeting, the Council approved recommendations from a Council appointed workgroup augmenting reporting requirements for domestic catcher/processors. As a result Chapter 4, "Improve Catch Recording Requirements", has been reincluded in this document, and the reporting requirements changes become part of Amendment 16 to the Gulf of Alaska FMP and an addendum to Amendment 11 of the Bering Sea FMP (approved by the Council in June 1987). The addendum to the Bering Sea Amendment 11 will be called Amendment 11a to the FMP.

1.1 List of the Management Measures

The Council is considering three management measures needed to resolve problems in the current management regime. These management measures are:

- (1) Revise the definition of prohibited species. (Amendment 16)
- (2) Update GOA FMP description sections, reorganize chapters, and incorporate Council policy as directed. (Amendment 16)
- (3) Augment the current catcher/processor weekly catch report by adding at-sea transfer information. (Amendment 16 and Amendment 11a)

1.2 Purpose of the Public Hearing Package

1.2.1 Environmental Assessment

One part of the package is the environmental assessment (EA) that is required by the National Oceanic and Atmospheric Administration in compliance with the National Environmental Policy Act of 1969. The purpose of the EA is to analyze the impacts of major federal actions on the quality of human environment. It serves as a means of determining if significant environmental impacts could result from a proposed action. If the action is determined not to be significant, the EA and resulting finding of no significant impact (FONSI) would be the final environmental documents required by NEPA. An EIS must be prepared if the proposed action may be reasonably expected: (1) to jeopardize the productive capability of the target resource species or any related stocks that may be affected by the action; (2) to allow substantial damage to the ocean and coastal habitats; (3) to have a substantial adverse impact on public health or safety; (4) to affect adversely an endangered or threatened species or a marine mammal population; or (5) to result in cumulative effects that could have a substantial adverse effect on the target resource species or any related stocks that may be affected by the action. Following the end of the public hearing, the Council could determine that Amendment 16 and Amendment 11a will have significant impacts on the human environment, and proceed directly with preparation of an EIS required by NEPA. This EA is prepared to analyze the possible impacts of management measures and their alternatives that are contained in Amendment 16 and Amendment 11a.

Certain management measures are expected to have some impact on the environment. Such measures are those directed at harvests of stocks and may occur either directly from the actual harvests (e.g. removals of fish from the ecosystem) or indirectly as a result of harvest operations, (e.g. effects of bottom trawling on the benthos (animals and plants living on, or in, the bottom substrate). Environmental impacts of management measures may be beneficial when they accomplish their intended effects (e.g. prevention of overharvesting stocks as a result of quota management). Conversely, of course, such impacts may be harmful when management measures do not accomplish their intended effects (e.g. overharvesting occurs when quotas are incorrectly specified). The extent of the harm is dependent on the amount of risk of overfishing that has occurred. For purposes of this EA, the term "overfishing" is that, which is described in the "Guidelines to Fishery Management Plans" (48 FR 7402, February 18, 1983). It is a level of fishing mortality that jeopardizes the capacity of a stock(s) to recover to a level at which it can produce maximum biological yield or economic value on a longterm basis under prevailing biological and environmental conditions. Environmental impacts that may occur as a result of fishery management practices are categorized as changes in predator-prey relations among invertebrates and vertebrates, including marine mammals and birds, physical changes as a direct result of on-bottom fishing practices, and nutrient changes due to processing and dumping of fish wastes. If more or less groundfish biomass is removed from the ecosystem, then oscillations occur in the ecosystem.

1.2.2 Regulatory Impact Review

Another part of the package is the Regulatory Impact Review (RIR) that is required by NMFS for all regulatory actions or for significant DOC/NOAA policy changes that are of public interest. The RIR: (1) provides a comprehensive review of the level and incidence of impacts associated with a proposed or final regulatory action; (2) provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the major alternatives that could be used to solve the problems; and (3) ensures that the regulatory agency systematically and comprehensively considers all available alternatives so that the public welfare can be enhanced in the most efficient and cost effective way.

The RIR also serves as the basis for determining whether any proposed regulations are major under criteria provided in Executive Order 12291 (E.O. 12291) and whether or not proposed regulations will have a significant economic impact on a substantial number of small entities in compliance with Regulatory Flexibility Act (P.L. 96-354, RFA). The primary purpose of the RFA is to relieve small businesses, small organizations, and small governmental jurisdictions (collectively, "small entities") of burdensome regulatory and recordkeeping requirements. This Act requires that if regulatory and recordkeeping requirements are not burdensome, then the head of an agency must certify that the requirement, if promulgated, will not have a significant effect on a substantial number of small entities.

This RIR analyzes the impacts that Amendment 16 alternatives and Amendment 11a would have on the Gulf of Alaska and Bering Sea groundfish fisheries. It also provides a description of and an estimate of the number of vessels (small entities) to which regulations implementing Amendment 16 and Amendment 11a would apply.

1.3 Description of the 1987 Domestic Fishing Fleet Operating in the Gulf of Alaska and in the Bering Sea/Aleutians Islands Area.

A total of 1,296 vessels may fish groundfish in the Bering Sea and Gulf of Alaska in 1987 (Table 1.1). This number is based on 1987 Federal groundfish permits that have been issued to domestic vessels as of March 27, 1987. This number includes vessels that will engage in only in harvesting operations (catcher vessels), vessels that will both harvest and process their catches (catcher/processor vessels), vessels that will only process fish (motherhip/processor vessels), and support vessels that will engage in transporting fishermen, fuel, groceries, and other supplies.

Table 1.1 Numbers of groundfish vessels that are less than 5 net tons or 5 net tons and larger that are federally permitted in 1987 to fish off Alaska.

	<u>Number of Occurrences</u>	
	<u>Less than 5 net tons</u>	<u>Over 5 net tons</u>
HARVESTING ONLY	97	972
HARVESTING/PROCESSING	19	188
PROCESSING ONLY	-	2
SUPPORT ONLY	—	18
Total vessels	116	+ 1,180 = 1,296

Of the total 1,296 vessels, 91% or 1,180 are 5 net tons or larger. Nine percent or 116 vessels are less than 5 net tons. The rest of this analysis is limited to discussion of the larger vessels, i.e., those that are 5 net tons or larger. They are located in Seattle, Sitka, Kodiak, and Dutch Harbor, and other non-Alaska and Alaska ports. Most of these larger vessels come from Alaska, based on telephone area codes given with permit applications. The numbers of vessels that come from Alaska is 717; the number from the Seattle area is 280; and the number from other areas is 183. Vessels by processing mode are shown in Table 1.2.

Table 1.2 Numbers of groundfish vessels Federally permitted to fish off Alaska in 1987 from the Seattle area, Alaska, and other areas.

<u>Mode</u>	<u>Number</u>		
	<u>Seattle Area</u>	<u>Alaska</u>	<u>Other Areas</u>
HARVESTING ONLY	200	608	164
HARVESTING/PROCESSING	63	107	18
PROCESSING ONLY	2		
SUPPORT ONLY	15	2	—
Total	280	717	183

The total number of catcher vessels (harvesting only) and catcher/processor vessels (harvesting/processing) is 972 and 188, respectively. Net tonnages of catcher vessels and catcher/processor vessels varies widely. The total net tonnage of the catcher vessels is 56,047 net tons, and the total net tonnage of the catcher/processor vessels is 14,744 net tons.

Vessels involved in harvesting only (catcher vessels) employ mostly three types of gear: hook-and-line (longline), trawls, or pots. Most of the catcher vessels are hook-and-line vessels, which number 755 (see Table 1.3). They are mostly the smallest vessels fishing groundfish, having average net tonnage capacities equal to 28 net tons and average lengths of 47 feet.

Table 1.3 Numbers and statistics of catcher vessels by gear type that are Federally permitted to fish off Alaska.

	<u>Number</u>	<u>Average Net Tons</u>	<u>Average Length (ft)</u>
HOOK-AND-LINE	755	28	47
POTS	8	111	83
TRAWL	123	121	96
OTHER GEAR ^{1/}	<u>86</u>	46	54
TOTAL	972		

Vessels involved in harvesting and processing (catcher/processor vessels) also employ mostly hook-and-line, trawls, or pots. Most of the catcher/processor vessels, 118, also use hook-and-line gear (see Table 1.4). They are the smallest of the catcher/processor vessels, having average net tonnage capacities equal to 41 net tons and average lengths of 52 feet, but are larger than the catcher vessels using hook-and-line gear.

Table 1.4 Numbers and statistics of catcher/processor vessels by gear type that are federally permitted to fish off Alaska.

	<u>Number</u>	<u>Average Net Tons</u>	<u>Average Length (ft)</u>
HOOK-AND-LINE	118	41	52
POTS	5	127	104
TRAWL	27	246	144
OTHER GEAR ^{1/}	<u>38</u>	67	63
TOTAL	188		

Pot vessels number 5 and trawl vessels number 27. Their respective average net tonnage capacities are 127 and 246 net tons. Their respective average lengths are 104 and 144 feet. Other combinations of catcher/processor vessels exist. Thirty-eight catcher/processor vessels are equipped with combinations of other gear.

^{1/} Other gear includes combinations of hook-and-line, pots, trawls, jigs, troll gear, and gillnets.

2.0 REVISE THE DEFINITION OF PROHIBITED SPECIES (Amendment 16 - Gulf of Alaska)

2.1 Description of and Need for the Action

Prohibited species are not specifically defined in the current groundfish FMP for the Gulf of Alaska (GOA). Instead, the FMP relies on the term "unallocated species." Section 6.4.1 defines unallocated species as "those species and species groups which must be immediately returned to the sea by vessels operating in the groundfish fishery." One problem with this definition is that it does not clearly specify these species as prohibited and issue a warning that they are to be avoided if possible. Instead, it relies on the implication that there is no allocation for these (unnamed) species so, if caught, they cannot be retained.

Another problem is that the "unallocated species" definition is not consistent with references to prohibited species elsewhere in the FMP and its implementing regulations. Under Section 8.3.1.1(C), prohibited species restrictions are specified simply as "in accordance with existing state and federal statutes." Separate prohibited species restrictions are specified for foreign fisheries under FMP Section 8.3.2.1(B). These restrictions are more explicit about avoiding and not retaining six species groups. However, there is no explicit language that identifies unallocated species as prohibited species. It is possible to misconstrue unallocated and prohibited species as different categories of species.

A third problem is the reliance on "other applicable law" to define which species are prohibited. This creates a potential enforcement problem. For example, it may be currently impossible to penalize a groundfish fishermen found to be retaining incidentally caught king crab from the GOA for the following reasons. First, king crabs are explicitly excluded from the listing of prohibited species in the regulation [§672.20 (e)(1)(i), (ii) and (iii)]. Second, since there are no existing Federal regulations restricting the catch of king crabs in the GOA, the culpable vessel would have to be registered in the State of Alaska for state restrictions on king crab catches to apply. If the culpable vessel were not registered in the State of Alaska, then there would be no other existing state or federal "statutes" or regulations that would be violated with respect to retention of king crab.

In summary, the FMP has flawed definitions of prohibited species. As a result, regulations implementing these FMPs, pertaining to prohibited species, suffer from confusing and imprecise language that may not be legally enforceable against every vessel fishing for groundfish in the EEZ off Alaska. This is especially true for Tanner and king crab species since anticipated FMPs for these species are not now in effect. This problem extends also to other non-groundfish species for which other applicable law does not exist.

2.2 The Alternatives

2.2.1 Alternative 1: Do nothing (the status quo).

Under this alternative, no changes would be made to the FMP definitions of prohibited species in the FMP or its implementing regulations.

2.2.2 Alternative 2 (Preferred): Revise definition of prohibited species.

Under this alternative the prohibited species definitions in the FMP would be changed to list those species or species groups which must be avoided while fishing for groundfish and, if caught incidentally, must be immediately returned to the sea with minimum injury. Listed species will include the "traditional" species of salmonids, halibut, herring, king and Tanner crabs for domestic and foreign groundfish fisheries plus other non-groundfish species for the foreign fishery only. Retention of any of these species would not be allowed unless authorized by other applicable federal law. This would allow, for example, a groundfish fisherman the option of retaining halibut caught by hook and line gear during an open season for halibut specified by the International Pacific Halibut Commission. In addition, the definitions would provide for treating groundfish for which the quota has been fully harvested in the same manner as prohibited species. Changes appropriately reflecting these new definitions would be made in the respective regulations implementing the FMP.

2.3 Biological and Physical Impacts

Pacific halibut, Pacific herring, salmon, steelhead trout, king and Tanner crabs are often referred to as the "traditional" prohibited species because of preexisting state restrictions on taking these species outside of bona fide fisheries for them. In addition, the traditional fisheries off Alaska have largely involved these species. The Council clearly indicates in both of its groundfish FMPs its intent to protect these traditional fisheries while fostering the growth of the domestic groundfish fishery. Hence, there is a general common understanding of what species are prohibited and must not be retained if caught while fishing for groundfish.

Neither alternative would change this common understanding of prohibited species. The expected biological and physical impacts of implementing either alternative, therefore would be nil. No substantive change is expected in the behavior of the groundfish fishery under either alternative. Therefore, the amount and kind of fishing mortality imposed on groundfish and non-groundfish species will likely remain unchanged. Likewise, no significant change in the perturbations on the physical environment from fishing activity is expected under either alternative.

To the extent that enforcement of prohibited species restrictions is enhanced under Alternative 2, however, domestic groundfish fishermen may improve their ability to avoid catches of prohibited species. As such, Alternative 2 may provide for a marginal decrease in the mortality rate of prohibited species. In addition, there may be an associated decreased perturbation of the physical environment important to prohibited species due to decreased activity of fishing gear in areas of prohibited species abundance. The extent to which these improvements in the environment of prohibited species may occur is speculative at best and impossible to measure against the normal variability of factors affecting marine life in the epibenthos and water column.

2.4 Socioeconomic Impacts

Because Alternative 2, as compared to the status quo, would not significantly affect the common understanding of prohibited species, no significant change in the behavior of groundfish fishermen is expected under Alternative 2. Hence, this alternative would not significantly affect the amount of groundfish harvested, the location or timing of the fishery, nor the choice of fishing gear used. Instead, the intended and expected effect is an improvement in the ability to enforce the Council's existing and basic policy on prohibited species. Any economic impacts on the groundfish fishery from implementation of Alternative 2, therefore, would stem from an increased probability of imposing penalties for violating prohibited species regulations.

Assuming that penalties for violating prohibited species regulations has the effect of increasing conformance within the groundfish fishery, economic benefits under Alternative 2 would accrue to the legitimate users of the prohibited species, i.e., the salmon, steelhead, herring, halibut and crab fisheries, since more of these species would remain unharvested by the groundfish fishery. Whether implementation of Alternative 2 would cause any real increases in catches in the salmon, herring, halibut and crab fisheries is debatable and would depend on a substantial decrease in the actual number of prohibited species intercepted by the groundfish fishery. Calculating these benefits would require information on the number, size and species of prohibited species that would not be intercepted due to the threat of punitive legal action under Alternative 2 and the assumption that those species not intercepted would ultimately be caught by legal fisheries. Such information is not available.

Another potential benefit from implementing Alternative 2 is the increased potential of successfully prosecuting groundfish fishermen who violate prohibited species regulations. This benefit cannot be characterized in monetary terms unless the information described above is available and the attendant assumptions are correct. Otherwise, this benefit may be viewed more as a cost to society in terms of increased litigation and a cost to fishermen violators who otherwise (under the status quo) would have been treated with impunity.

In summary, marginal economic benefits of Alternative 2 in terms of decreased interceptions of prohibited species by the groundfish fishery are speculative at best in qualitative terms and cannot be quantitatively estimated. The principle benefit of Alternative 2, however, is the improved ability to enforce the prohibited species regulations against all vessels fishing for groundfish in the EEZ off Alaska. If it is assumed that this improved enforcement capability will result in increased conformance within the groundfish fleet, then the added administrative costs of prosecuting prohibited species violations probably are outweighed (in qualitative terms) by the assumed benefit of increased avoidance of prohibited species by the groundfish fishery.

3.0 UPDATE GOA FMP DESCRIPTIVE SECTIONS, REORGANIZE CHAPTERS, AND INCORPORATE COUNCIL POLICY AS DIRECTED (Amendment 16 - Gulf of Alaska)

3.1 Description of and Need for this Action

The Gulf of Alaska Groundfish FMP was implemented in 1978 and was the third management plan approved under the MFCMA. At the time of its development, preparers had little knowledge as to how a plan should be organized and the type of descriptive material and management measures it should contain. In the ten years of fisheries management under the Magnuson Act managers have identified the plan's strengths and weaknesses, and have learned that routine management actions are most efficiently handled through framework measures. Since 1978, the Gulf FMP has been amended 14 times to incorporate new framework management measures, revise conventional measures, and make administrative improvements. Little effort has been spent in updating the descriptive sections of the plan or to make improvements to the plan's format. For this reason, the Gulf FMP is terribly out of date, difficult for managers and the public to read and use, and as a result has lost some of its effectiveness as a management tool. This amendment completely updates the descriptive sections of the plan (i.e., description of groundfish life histories, stock status, characteristics of the fishery, etc.) to reflect current knowledge. The plan will be reorganized to make the document easier to read and use and to update in the future. Technical revisions to the text and regulations to reflect Council policy with regard to gear restrictions, and working definitions will be incorporated and fully analyzed where necessary. Vessel safety considerations will also be added to the plan to bring it into conformance with recent Magnuson Act amendments. And finally, a respecification of target species with an accompanying description of rockfish assemblage management will be provided.

3.2 The Alternatives

3.2.1 Alternative 1: Do nothing - status quo.

Adoption of this alternative would leave the FMP's descriptive sections unchanged. It would also leave unaddressed the other problems discussed in the above statement of need. Management of rockfish using the assemblage approach would be more difficult to implement since a formal description of the concept would be absent from the FMP. Council policy with regard to legal gear and experimental fisheries would be difficult to enforce.

3.2.2 Alternative 2 (Preferred): Update the descriptive sections, reorganize the chapters, and incorporate Council policy into the FMP as directed.

Approval of this alternative would address fully the problems described above. Most of the amendment focuses on the descriptive sections of the plan. Since these sections are only descriptive, no implementing regulations or accompanying regulatory analysis is necessary. This amendment does however, make several technical changes to the plan with some requiring regulatory revisions. These few technical changes are described below:

(a) Target Species - defined as those species or species categories that support either a single species or mixed species target fishery. Current list and proposed list are shown in Table 3.1.

Adoption of this alternative eliminates the POP complex and Other Rockfish category by replacing it with a new category called Rockfish. This general category is composed of the three rockfish assemblages currently specified in the plan. All three assemblages occur in abundance in the Southeast Outside District (east of 137°W. long.). The abundance and species diversity of the shelf pelagic and shelf demersal assemblages declines to the west. Given current knowledge on the rockfish resource, it is likely, that for this reason, the Council will manage all assemblages together as a general group west of 137°W. long. (in the Western and Central Areas separately or combined). In the Southeast Outside District, the Council may choose to manage rockfish together or by assemblage. Thornyhead rockfish will be included in the new Rockfish category and managed as a single species if necessary. The category Atka mackerel and squid will be placed in the Other Species category.

(b) Drop the term Target Quota (TQ) and replace it with Total Allowable Catch (TAC). The definition would remain unchanged. This term represents the harvest quota for a species or species group. Making this adjustment would bring this term into conformity with that currently used in the Bering Sea/Aleutian Islands Groundfish FMP.

(c) Revise the definition for acceptable biological catch (ABC) to bring it into conformity with the definition used by the Scientific and Statistical Committee and the Pacific Fishery Management Council.

The current definition reads as follows:

ABC is a seasonally determined catch that may differ from MSY for biological reasons. It may be lower or higher than MSY in some years for species with fluctuating recruitments. The Council can set the ABCs for individual species anywhere between zero and the maximum possible removal based on the best scientific information presented by the Plan Team and/or Scientific and Statistical Committee. The ABC may be modified to incorporate safety factors and risk assessment due to uncertainty. Lacking other biological justification, the ABC is defined as the maximum sustainable yield exploitation rate multiplied by the size of the biomass for the relevant time period. The ABC is defined as zero when the stock is at or below its threshold.

This alternative would replace the existing definition with the following revised definition:

ABC is a seasonally determined catch or range of catches that may differ from MSY for biological reasons. It may be lower or higher than MSY in some years for species with fluctuating recruitments. Given suitable biological data and justification by the Plan Team and/or Scientific and Statistical Committee, ABC may be set anywhere between zero and the current biomass less the threshold value. The ABC may be modified to incorporate safety factors and risk assessment due to uncertainty. Lacking other biological justification, the ABC is defined as the maximum

Table 3.1 Groundfish species or species categories managed by this plan.

<u>Current Target Species</u>	<u>Proposed Target Species</u>
Pollock	Pollock
Pacific cod	Pacific cod
Flounders	Flounders
Pacific ocean perch	Rockfish
Other rockfish	- slope assemblage
Thornyhead rockfish	- shelf demersal assemblage
Sablefish	- shelf pelagic assemblage
Atka mackerel	- thornyhead rockfish
Squid	Sablefish
Other species	Other species
- sculpins	- Atka mackerel
- sharks	- squid
- skates	- sculpins
- eulachon	- sharks
- smelts	- skates
- capelin	- eulachon
- octopus	- smelts
	- capelin
	- octopus

sustainable yield exploitation rate multiplied by the size of the biomass for the relevant time period. The ABC is defined as zero when the stock is at or below its threshold.

In addition, this amendment would introduce the definition of the term "threshold" and "overfishing", which are as follows:

Threshold is the minimum size of a stock that allows sufficient recruitment so that the stock can eventually reach a level that produces MSY.

Implicit in this definition are rebuilding schedules. They have not been explicitly specified since the selection of a schedule is a part of the OY determination process. Interest instead is on the identification of a stock level below which the ability to rebuild is uncertain. The estimate given should reflect use of the best scientific information available. Whenever possible, upper and lower bounds should be given for the estimate.

Overfishing is a level of fishing mortality that jeopardizes the capacity of stock(s) to maintain or recover to a level at which it can produce maximum sustainable yield on a long-term basis under prevailing biological and environmental conditions. Overfishing is the application of exploitation rates that drive the stock below its threshold. Exceeding acceptable biological catch need not result in overfishing, unless the excess is taken over sufficient time to reduce the population below the threshold.

(d) Specification of legal gear. This amendment will incorporate Council policy with regard to authorized gear in the groundfish fisheries. The following statement will be added to the existing gear restrictions section:

This plan authorizes the use of trawls, pot and longline, and hook and longline as legal gear for the commercial harvest of groundfish. (Further area restrictions apply and are described already in the plan; i.e. sablefish). All other gear is prohibited. However, possession of an NMFS experimental fishery permit authorizes the use of experimental gear on a limited basis. Annual application for use of experimental gear must be made to the Regional Director, Alaska Region, NMFS, and contain the following elements: Personal name, vessel name, valid federal fishing permit, description of gear type, description of experiment, description of vessel, description of species to be harvested and the amounts necessary to conduct the experiment. Upon completion of the experiment a written report is to be made available to NMFS for public distribution.

Adoption of this policy will bring the Gulf FMP into conformity with the Pacific Fishery Management Council's West Coast Groundfish FMP and other FMP's around the country.

(e) Limit the use of a species specific reserve in the plan. A 20% reserve has been a part of the Gulf groundfish FMP since its inception. The reserve is a calculated portion of a species specific quota and was intended to provide a source for additional domestic, joint venture, and foreign allocation during the year if needed. With recent amendments to the MFCMA and

the FMP, a species specific reserve may no longer be a useful management tool for some fisheries. The Secretary now has the authority to adjust the initial allocations and transfer amounts of fish between the various users without requiring that such adjustments come from a reserve account. For 1987, the Council did not use the reserve provision for groundfish fisheries that were entirely domestic. With these species, all the available quota is apportioned to domestic fisheries at the beginning of the year. No reserve is necessary. At this time, domestic fisheries fully utilize sablefish and rockfish. Maintaining reserve for the more abundant species or species categories (i.e., pollock, Pacific cod, flounders, and Other Species) would provide a source for additional allocation between domestic and foreign users during the year.

(f) Vessel safety considerations. The 1986 amendment to the Magnuson Act requires that each FMP consider, and may provide for, temporary adjustments, after consultation with the Coast Guard and persons utilizing the fishery, regarding access to the fishery for vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safety of the vessels.

3.4 Biological and Physical Impacts

3.4.1 Alternative 1: Do nothing - status quo.

Adoption of this option would continue the existing problems with rockfish management as discussed in the statement of need. The status quo would continue the incidental mortality associated with bycatches of rockfish and when combined with outdated quota methodology could lead to overharvests of some rockfish species to the detriment of the resource. In the event that overfishing occurs, fewer numbers of rockfish would be in the ecosystem. The predator-prey relationship would be disturbed in that fewer prey species would be consumed by rockfish remaining in the system, and fewer rockfish species would be consumed by marine life that preys on them. When a quota for a rockfish assemblage has been reached and a fishing closure has been implemented, rockfish species in that assemblage must be treated as a prohibited species and discarded at sea under the existing management regime. Rockfish species discarded at sea are dead and would be consumed by various marine life or they would decompose and contribute to the background nutrient load in the system. These impacts are difficult to quantify but are considered insignificant when compared to naturally occurring perturbations that occur in the environment.

Under the status quo, confusion within management and the fishing industry with regard to terminology would continue.

3.4.2 Alternative 2 (Preferred): Update the descriptive sections, reorganize the chapters, and incorporate Council policy into the FMP as directed.

(a) Replace the POP Complex and Other Rockfish, with the new management category "Rockfish", subdivided into the three assemblages and thornyhead rockfish where necessary. Atka mackerel are to be placed in the Other Species category.

Over 40 species of rockfish of the genera Sebastes and Sebastolobus are found in the Gulf of Alaska. Species diversity is highest in the eastern Gulf and declines to the west. Rockfish are currently managed in three groups with separate quota strategies: the Pacific ocean perch complex, Other Rockfish, and Thornyhead rockfish. Since plan implementation in 1978, Pacific ocean perch (S. alutus) has been managed either separately or included in the red rockfish group commonly known as the POP complex. The POP complex was isolated from the other rockfish found in the Gulf of Alaska because it was the predominant species harvested by foreign fleets prior to the MFCMA and has been at a very low level of abundance. The POP quota is based on survey estimates of current biomass, catch at age analysis, and estimated recruitment. All other Sebastes rockfish are placed in the general category and as with the Thornyhead rockfish category, are managed using Gulfwide quotas based on historical estimates of these species in the foreign POP fishery. Given the results of recent rockfish surveys and that the character of the fishery has completely changed (now fully domestic), the plan team believes the setting of quotas using historical data is no longer appropriate and attempts should be made to set area specific harvest limits using more current information.

In 1985 the plan was amended to introduce three rockfish categories: The slope, shelf pelagic, and shelf demersal assemblages (Table 3.2). Research has shown that all rockfish inhabit one of these three habitats. The shelf demersal assemblage consists of non-schooling species that occur in the shallower waters of the continental shelf very close to the bottom and are currently harvested primarily with longline gear. The shelf pelagic rockfish assemblage consists of schooling species which occur near or off-bottom and frequently concentrate around prominent geological features. While there is little targeted effort on this assemblage at this time, off-bottom trawls and jig gear can be used to harvest these species. The slope assemblage occurs in the deeper waters of the continental shelf and the steep slopes along the shelf edge and consists of primarily bottom oriented species which can be harvested with bottom trawls or longlines.

Fisheries targeting on one or more species in a particular assemblage, almost always incidentally harvest other rockfish of that assemblage. For example, when trawling for POP, other slope rockfish are also captured. Or, when longlining for yelloweye rockfish, other shelf demersal rockfish are harvested. A management problem exists when the quota for POP is achieved prior to the other rockfish quotas being taken (or vice versa). Fishermen could not fish for their target without incidentally harvesting the closed species. The Council believes that this is improper management of the resource and directed the plan team to develop a comprehensive management strategy for rockfish. In 1985 Amendment 14 introduced the rockfish assemblages based on observed habitat. In 1986, Amendment 15 implemented a harvest quota framework procedure that allows the Council to specify quotas for each target species category. This amendment, Amendment 16, will revise the target species list so that beginning in 1987, the Council can specify harvest quotas for one rockfish category or by rockfish assemblage if desired (Table 3.1).

Thornyhead rockfish (Sebastolobus sp.) will be included in the Rockfish management category. This species group are incidentally caught in trawl and longline groundfish fisheries targeting at other species. Thornyhead rockfish

Table 3.2 Gulf of Alaska rockfish assemblages.

Slope Assemblage

Aurora rockfish (S. aurora)
 Blackgill rockfish (S. melanostomus)
 Chilipepper rockfish (S. goodei)
 Darkblotch rockfish (S. crameri)
 Greenstriped rockfish (S. elongatus)
 Harlequin rockfish (S. variegatus)
 Northern rockfish (S. polyspinus)
 Pacific ocean perch (S. alutus)
 Pygmy rockfish (S. wilsoni)
 Red banded rockfish (S. babcocki)
 Rougheye rockfish (S. aleutianus)
 Sharpchin rockfish (S. zacentrus)
 Shortbelly rockfish (S. jordani)
 Shortraker rockfish (S. borealis)
 Splitnose rockfish (S. diploproa)
 Stripetail rockfish (S. saxicola)
 Vermilion rockfish (S. miniatus)
 Yellowmouth rockfish (S. reedi)

Shelf Demersal Assemblage

Boccacio (S. paucispinus)
 Canary rockfish (S. pinniger)
 China rockfish (S. nebulosus)
 Copper rockfish (S. caurinus)
 Quillback rockfish (S. maliger)
 Redstripe rockfish (S. proriger)
 Rosethorn rockfish (S. helvomaculatus)
 Silvergray rockfish (S. brevispinus)
 Tiger rockfish (S. nigrocinctus)
 Yelloweye rockfish (S. ruberrimus)

Shelf Pelagic Assemblage

Black rockfish (S. melanops)
 Blue rockfish (S. mystinus)
 Dusky rockfish (S. ciliatus)
 Widow rockfish (S. entomelas)
 Yellowtail rockfish (S. flavidus)

are commonly found in groundfish fisheries targeting on flounder and the slope rockfish assemblage. However, recognizing that the flesh of thornyheads is highly regarded by commercial fishermen, this species may be managed as part of an assemblage or separately if considered necessary.

Atka mackerel (Pleurogrammus monopterygius) are distributed throughout the Gulf of Alaska, but are primarily found in the westward region. They were first encountered by foreign fisheries and research surveys in the early 1970s. Foreign fleets have historically been the primary harvesters of this resource, although U.S. catches increased as joint venture fisheries developed. By 1978 this resource began a declining trend and returned to trace levels in 1985. Since this resource is no longer a significant part of the commercial catch, it is appropriate to move the Atka mackerel category into the Other Species category for purposes of management. Should at sometime in the future this species return to its high levels of the mid-1970s, it can once again be managed separately.

Squid (Berryteuthis sp. and Gonatus sp.) are distributed throughout the Gulf and are encountered incidentally by the groundfish fisheries targeting on other species. Catches of squid have historically been low (averaging 428 mt) and estimates of biomass are difficult. For this reason, squid are also being moved to the other species category for purposes of management. Should in the future squid become a primary target species, it can again be managed separately.

Adoption of this amendment will will lead to more effective utilization of the rockfish resource and reduce the probability of overfishing. The biological and physical impacts of the rockfish fishery are not fully understood. Trophic interaction of rockfish with other species and dependence of other species for rockfish for food are just beginning to be explored. Perhaps the greatest potential risk is the impact of overharvest on the rockfish stocks themselves. This alternative is designed to reduce the probability of overfishing rockfish by managing the resource using the assemblage approach. To the extent that this reduces the risk of overharvesting local rockfish stocks, this alternative is superior to the status quo. The predator-prey relationship in the food web would be less disturbed as a result of reduced fishery-related disturbances, because the numbers of rockfish remaining in the system would be closer to an equilibrium with those removed by fishing activities. Other living marine species would be preyed on by rockfish remaining in the system, which in turn would be preyed on by other predators. These impacts are difficult to quantify but are considered insignificant when compared to naturally occurring perturbations that occur in the environment.

On-bottom trawl gear may result in some short term damage to the benthic environment. The long-term effect is likely to be a function of the type of gear, the duration of the effort and the area fished. Data is not currently available that would allow potential impacts to be quantified. Longline gear is set and retrieved vertically through the water column rather than dragged across the bottom and therefore impacts on the environment are thought to be insignificant. Both gear types catch and kill other non-target species to varying degrees, but accurate data is not available. However, in comparison with the existing rockfish fishery and its management, this amendment will not produce any measurable negative impacts on the environment.

(b) Drop the term Target Quota (TQ) and replace it with Total Allowable Catch (TAC). The definition would remain unchanged. This term represents the harvest quota for a species or species group. Making this adjustment would bring this term into conformity with that currently used in the Bering Sea/Aleutian Islands Groundfish FMP.

This amendment addresses an administrative correction and will have no effect on the environment. Currently the Gulf FMP specifies that a TQ will be set for every target species or species group. This quota is used to manage the fishery and when it is reached, is used to justify the closure of the fishery. In the Bering Sea/Aleutian Islands Groundfish FMP, the term TAC is used to represent the quota. It is used in the same way as TQ. Since the Bering Sea term has been in use for over five years, and TQ for only one year, changing the Gulf FMP to mirror that of the Bering Sea/Aleutian Islands will help standardize both groundfish plans and eliminate confusion with the terminology.

(c) Revise the definition for acceptable biological catch (ABC) to bring it into conformity with the definition used by the Scientific and Statistical Committee and the Pacific Fishery Management Council.

This amendment addresses an administrative correction and will have no effect on the environment. Both the Gulf FMP and the Bering Sea/Aleutian Islands Groundfish FMPs define a term ABC for use as a biological reference point when making management decisions. Recently the North Pacific Council's Scientific and Statistical Committee have revised the definition of ABC for purposes of clarification and approved a definition for the terms, threshold and over-fishing. This amendment revises the existing definition to conform with the current interpretation of ABC and with other groundfish FMPs.

Although the proposed change to the ABC definition will not cause direct impact on the environment, it will require, in order to determine upper and lower bounds to ABC, scientists to identify a population size which represents the "threshold". This requirement is likely to consume considerable resources as the scientific staff struggles to develop a theoretical model or empirical data to identify threshold population levels for the managed groundfish stocks.

(d) Specification of legal gear. This amendment will incorporate Council policy with regard to authorized gear in the groundfish fisheries.

Approval of this amendment will provide clarification as to what gear may be legally used in harvesting groundfish in the Gulf of Alaska. Currently, three gear types are used in this fishery: trawl, hook and line, and pots. This amendment to the FMP does not effect the status of these gear types other than more clearly acknowledging the gear as legal gear.

In comparison with the status quo, adoption of this amendment will have no environmental impacts over the short term since none of the gear currently used in this fishery will be prohibited. Over the long term significant benefits to the environment may accrue as a result of management control over new gear used in this fishery. These benefits may take the form of reduced gear conflicts with other legal gear, the reduction of lost gear and ghost fishing, prevention of habitat degradation, and reduced marine debris.

(e) Discontinue the use of a species-specific reserve for fully U.S. utilized species.

This amendment eliminates a procedural step for some target species categories in the administering of harvest quotas and will have no effect on the environment. As described in the statement of need, a species-specific reserve account is no longer necessary given recent amendments to the FMP and the MFCMA. Inseason reapportionment of harvest quotas are authorized without requiring a reserve account. However, maintaining a reserve is still useful for the more abundant species that can potentially support both domestic and foreign harvests.

(f) Adopt language to accommodate vessel safety considerations.

Approval of this amendment will bring the FMP into conformity with recent amendments to the Magnuson Act. The purpose of the amendment is to require that vessel safety considerations be made a part of regional fishery management decision-making.

3.5 Socioeconomic Impacts

Fishery costs and benefits

There would be no increase or decrease in economic benefits or costs to the fishery sectors in the immediate future if Alternative 2 is chosen over the status quo. With regard to the rockfish fishery, Table 3.3 shows the quotas and catches for 1984-86.

These figures indicate that in general the catches are considerably lower than the quotas with the exception of the Eastern area where the POP quota was surpassed in 1986. Management of this fishery by the assemblage approach will have no real effect in the Western and Central areas in the near term. However, in the Eastern Regulatory Area, improved management of the resource will have immediate effects. For example, assume that the POP complex fishery is closed because its quotas had been reached (as in 1986). If the Other rockfish category is left open, directed fishing on certain species within this category could result in large bycatch of members of the POP complex since some members of the complex and the other rockfish category are found together. This bycatch could be especially harmful considering the extremely high mortality suffered by rockfish when caught and would severely undermine the Council's attempts to rebuild this resource to a level that will support a sustainable economic fishery. Therefore, Alternative 2 provides an important economic benefit by reducing the chance of overfishing a segment of the rockfish complex.

Short seasons and heavy competition for fish could lead fishermen to fish during wind and weather conditions which are marginal or dangerous. Occasionally, conditions are such that few, if any, vessels can fish during a particular season opening. In such a situation, fishermen either sail in harm's way or miss all or part of an opening. This causes economic dislocations in all sectors (dependent upon the fishery) and prevents achievement of the quota. Fishing during poor weather detracts from economic efficiency in several respects. The fishing itself is more difficult and thus

Table 3.3 Quotas and catches of Pacific ocean perch complex and other rockfish (mt)

	Pacific Ocean Perch				Other Rockfish			
	<u>Western</u>		<u>Central</u>		<u>Eastern</u>		<u>Gulfwide</u>	
	<u>Quota</u>	<u>Catch</u>	<u>Quota</u>	<u>Catch</u>	<u>Quota</u>	<u>Catch</u>	<u>Quota</u>	<u>Catch</u>
1984	2,700	116	7,900	19	875	289	7,600	4,806
1985	1,302	848	3,906	53	875	148	5,000	1,725
1986	1,316	618	1,511	391	875	1,840	5,000	2,962

less efficient. Additional Coast Guard search and rescue resources are expended. Loss of vessels, equipment, and human life and injury are gross diseconomies.

The purpose of the amendment is to require that vessel safety considerations be made a part of the management decision making process. This amendment will contribute to the overall economic benefit to the nation by increasing the probability of a more efficient and productive groundfish fishery with lower expenditure of resources and loss of resources.

The other technical and administrative aspects of Alternative 2 will have no significant socioeconomic impact since the amendment only addresses administrative problems, descriptive inconsistencies, and terminology.

Reporting costs

The proposed alternative to the status quo would not increase the reporting burden on fishermen and processors. Under current regulations, fishermen are required to complete a fish ticket upon landing their catch. The fish ticket lists the target species by name and fishermen are required to report their landing of each of the target species (or species category). Approval of Alternative 2 will not effect this requirement.

Administrative, enforcement, and information costs and benefits

Adoption of Alternative 2 will reduce administrative costs, improve enforcement capability, and provide more reliable catch information. Administrative costs will be reduced because managers will no longer be annually required to calculate and publish groundfish reserve amounts. However, the savings will be relatively small. Enforcement capability will be improved as a result of more logical species management for rockfish, making enforcement of quotas easier; and that legal gear will be clearly specified in the regulations, preventing an intended or inadvertent circumnavigation of the regulations. Catch information will become more reliable since the rockfish assemblage categories also follow the species grouping used by domestic processors. Catch statistics, generated from fish tickets filled out by fishermen or processors, will therefore be more reliable when compared to the current procedure of attempting to identify individual species and assigning the data to either the Pacific ocean perch complex or Other Rockfish category. Costs of management staff attempting to sort out rockfish data will be reduced as a result of this amendment.

Impact on consumers

This alternative would not effect the quality or the price of the product to the consumer.

Redistribution of costs and benefits

The benefits of this amendment primarily take the form of more efficient management, which all user groups share equally. Revising the rockfish category so that each category reflects the assemblage from which the species was caught, the standardization of quota terminology, the clarification of legal gear, and the elimination of some or all outdated administrative reserve calculations, will lead to improved fisheries management.

Benefit-Cost conclusion

Beyond the efficiency of management by categorizing rockfish by assemblage and eliminating non-species specific reserve, enforcement costs savings should be realized by adoption of Alternative 2. Enforcement of rockfish quotas and legal gear regulations should be improved. Benefits of having an updated FMP will be realized with Alternative 2 and shared by both management and the public alike.

4.0 IMPROVE CATCH RECORDING REQUIREMENTS (Amendment 16 and Amendment 11a)

4.1 Description of and Need for the Action

The domestic groundfish fishery is rapidly displacing the foreign groundfish fishery in the U.S. EEZ off Alaska. The domestic harvest exceeded the foreign harvest for the first time in 1986. The groundfish catch by U.S. fishermen has grown from 8,600 mt in 1979 to over 1.4 million mt in 1986. Although domestic trawlers fishing in joint ventures with foreign processors are responsible for the majority of this increase, a rapidly growing fleet of U.S. catcher/processor and mothership vessels are contributing to a rapidly growing wholly U.S. catching and processing industry.

Catcher/processor and mothership vessels, like vessels landing their catch at shoreside processors, must complete State of Alaska groundfish fish tickets. Because these vessels land infrequently, however, they are required to submit an additional weekly catch report directly to NMFS. The accuracy of catch information reported on State fish tickets by groundfish vessels landing their catch shoreside can be easily verified by observing the off-loading, sorting, and weighing of the catch at shoreside processing establishments. In this manner NMFS is able to guard against gross underreporting of catch or misrepresentation of the species caught.

Catcher/processor and mothership vessels, on the other hand, often off-load processed catch at sea for direct transport to foreign or domestic destinations. No record is currently required of the amount of product off-loaded. Furthermore, because product may never come ashore where NMFS can verify the accuracy of the reported catch, no means exist to verify the accuracy of either the State fish tickets or the weekly catch reports submitted by catcher/processor and mothership vessels. Thus, NMFS is unable to effectively enforce those regulations, such as bycatch restrictions and gear quotas, that require an accurate accounting of the amounts of each groundfish species harvested.

The extent of current underreporting is unknown, but past experience in foreign fisheries indicates that as much as 25%-50% of annual harvests taken by catcher/processors or purchased by motherships may have been unreported.

4.2 The Alternatives^{1/}

Five alternatives are considered, including the status quo. Alternatives 2 and 3 are directed only at vessels that are 5 net tons or larger.

1/ At its September 23-25, 1987 meeting the Council adopted recommendations for changes to the current reporting requirements for domestic catcher/processors and mothership/processors. These changes were recommended by a Council-appointed workgroup and include (1) the augmenting of the weekly catch report to include at-sea transfer information and (2) the addition of a cargo transfer/off-loading log. These changes were not specifically analyzed in the EA/RIR sent out for public review on April 3, 1987 and are absent from the EA/RIR sent out for public review in July 1987. Nevertheless, the September Council action is to recommend changes that are a subset of alternatives considered in the earlier public review package. This new alternative is herein included as Alternative 5 and is the Council's preferred alternative.

- 4.2.1 Alternative 1: No change in current reporting requirements (status quo).
- 4.2.2 Alternative 2: Require catcher/processor and mothership vessels to document their operations by maintaining a fishing logbook which includes daily cumulative production log (DCPL), fishing effort, and discard sections, and a transfer logbook. Other groundfish vessels over 5 net tons would be required to maintain the fishing effort and discard sections only.
- 4.2.3 Alternative 3: Require only catcher/processor and mothership vessels to maintain a comprehensive fishing logbook (including DCPL, fishing effort, and discard sections) and a transfer logbook. Other vessel categories would have no logbook requirements.
- 4.2.4 Alternative 4: Require catcher/processor and mothership vessels to maintain only the DCPL logbook section and the transfer logbook. The fishing effort and discard sections would be deleted from the fishing logbook.
- 4.2.5 Alternative 5 (Preferred): Require domestic catcher/processor and mothership/processor vessels to augment the weekly catch report with product transfer information and require those vessels to maintain a cargo transfer/off-loading log.

4.3 Biological and Physical Impacts

- 4.3.1 Alternative 1: No change in current reporting requirements (status quo).

This alternative would prevent full accounting for amounts of groundfish that are removed from the ecosystem, and may thus increase the risk of overfishing. Improved accounting of amounts of groundfish that are removed from the ecosystem is necessary to lessen the risk of overharvesting groundfish stocks. Under Alternative 1, environmental impacts that might occur as a result of overharvesting groundfish stocks include changes in predator-prey relations among invertebrates and vertebrates, including marine mammals and birds, physical changes as a direct result of on-bottom fishing practices, and nutrient changes due to processing and dumping of fish wastes.

- 4.3.2 Alternative 2: Require catcher/processor and mothership vessels to document their operations by maintaining a fishing logbook which includes daily cumulative production log (DCPL), fishing effort, and discard sections, and a transfer logbook. Other groundfish vessels over 5 net tons would be required to maintain the fishing effort and discard sections only.

The Daily Cumulative Production Log (DCPL) would contain daily and cumulative production totals for finished product on a species and product-type basis. It would also include basic information on where and when fishing occurred. The transfer logbook would contain a record of all off-loadings, also according to species and product type. The transfer logbook would also include the name of the vessel transporting the product, date of off-loading, and the port of destination. Thus, the subtraction of the cumulative amount

of product off-loaded from the cumulative production recorded in the DCPL would result in the amount of product remaining on board. By this means, NMFS would be able to verify the accuracy of all catch reports by examining the DCPL and transfer logs either during a vessel boarding or subsequent to the season after all logbooks are returned.

The DCPL, transfer logbook, and weekly catch report are all expected to be accurate to the nearest 0.1 mt. This alternative specifies that the DCPL, transfer logbook, and the presently required weekly catch reports all be completed by species and finished product type. Current regulations require the weekly catch report to be by round weight by species which requires the vessel operator to convert from finished product back to round weight. NMFS will publish a list of standard product conversion rates at the beginning of the year which will be used to convert the weekly reports to round weight for the purpose of monitoring overall quotas for gear types and regulatory areas.

This alternative would provide additional data needed for stock assessment and the evaluation of management measures through the collection of information on fishing effort and discards from the entire groundfish fleet. It would promote enforcement of catch reporting through the maintenance of the DCPL and the collection of information on amounts of groundfish that have been off-loaded, thereby improving information on total fish removals.

- 4.3.3 Alternative 3: Require only catcher/processor and mothership vessels to maintain a comprehensive fishing logbook (including DCPL, fishing effort, and discard sections) and a transfer logbook. Other vessel categories would have no logbook requirements.

This alternative would be less data intensive than Alternative 2 in that it would only apply to catcher/processor and mothership vessels and not to all vessels that harvest groundfish.

- 4.3.4 Alternative 4: Require catcher/processor and mothership vessels to maintain only the DCPL logbook section and the transfer logbook. The fishing effort and discard sections would be deleted from the fishing logbook.

This alternative would verify the accuracy of catch records and enforce groundfish regulations, but would do little to replace the biological and fisheries performance data currently collected from the foreign fisheries. To the extent that the loss of this data might result in potential overharvest, the risk of overfishing is greater than under Alternatives 2 and 3, but less than under Alternative 1.

- 4.3.5 Alternative 5 (Preferred): Require domestic catcher/processor and mothership/processor vessels to augment the weekly catch report with product transfer information and require those vessels to maintain a cargo transfer/off-loading log.

This alternative would provide NMFS enforcement personnel with the ability to account for product transferred at-sea and transhipped from U.S. waters. This would close a reporting loophole and result in less underreporting than had been the case under the status quo. To the extent that underreporting leads to overharvesting, the probability of overfishing would be decreased.

4.4 Socioeconomic Impacts

4.4.1 Alternative 1: No change in current reporting requirements (status quo).

No changes in reporting costs incurred by fishermen or floating processors would occur. No additional administrative, enforcement, or information costs would occur. However, the need for credible biological and fisheries performance information would still exist. Alternative ways of collecting this information, such as onboard observers and increased research vessel time would impose costs on society, fishermen, or both. Potential costs resulting from declining groundfish stocks, and thus allowable harvest, caused by under-reporting and possible overfishing are not estimable but may become substantial.

4.4.2 Alternative 2: Require catcher/processor and mothership vessels to document their operations by maintaining a fishing logbook which includes daily cumulative production log (DCPL), fishing effort, and discard sections, and a transfer logbook. Other groundfish vessels over 5 net tons would be required to maintain the fishing effort and discard sections only.

Costs that would be incurred by all groundfish fishermen with vessels larger than 5 net tons are associated with completing the fishing effort and discard sections of the fishing logbook. Catcher/processor and mothership vessels would also need to complete the DCPL section and the transfer logbook. Based on the NMFS data base on groundfish permits issued for 1987, there are 972 catcher vessels, 188 catcher/processors, and 2 mothership vessels, which is a maximum of 1,162 vessels that would be required to complete the fishing effort and discard sections of the fishing logbook. The 188 catcher/processors identified in the NMFS licensing data base includes 27 using trawl gear with the remainder being hook-and-line and pot vessels.

Costs of complying with this information collection requirement are those resulting from having to complete and maintain the logbooks. These costs are derived by estimating the total fleet vessel-days during a year for which records might be required, multiplying vessel-days by the number of minutes each respondent might spend in filling out a log, and then dividing by 60 minutes to obtain the total number of hours per year that might be spent by DAP fishermen to maintain these logbooks. NMFS estimates that an average of about 15 minutes and 30 minutes per day would be required for catcher vessels and catcher/processor vessels, respectively, to complete the fishing effort section of the fishing logbook. About 10 minutes per day would be required to complete the Discard section of the logbook. About 30 minutes per day would be required to complete the DCPL section and about 10 minutes per day would be required to complete the Transfer Logbook. Costs across the fleet to comply with these new requirements are estimated as follows:

Fishing effort section - Assuming catcher vessels average about 20 days fishing each month and fish for an average of three months each year, then 972 catcher vessels would fish for an estimated 58,320 vessel-days. Completing the fishing effort section of the fishing logbook, at 15 minutes per log per day would require 14,580 hours per year. If catcher/processor vessels average 20 days fishing each month for an average of six months, then 188 catcher/

processor vessels will fish for 22,560 vessel-days per year. Completing fishing effort sections by this class of vessels at 30 minutes per log would require 11,280 hours per year. Thus, the maximum total costs on all DAP vessels to complete the fishing effort section is about 25,860 hours per year.

Discard section - If the 188 catcher/processor and two mothership vessels were to average 20 days fishing for an average of six months per year, then these vessels would fish for an estimated 22,800 vessel-days per year. Completing the discard section of the fishing logs at 10 minutes per log per day would require 3,800 hours per year. The 972 catcher vessels would spend 9,720 hours per year completing the discard section. Thus, the maximum total costs on all DAP vessels to complete the discard log is about 13,520 hours per year.

DCPL section - If the 188 catcher/processor and two mothership vessels were to fish for an average of 20 days per month for an average of six months per year, then these vessels would also fish for an estimated 22,800 vessel-days per year. Assuming it takes 30 minutes per day to complete the DCPL, the maximum total hours spent to complete the DCPL is 11,400 hours per year.

Transfer logbook - If the 188 catcher/processor and two mothership vessels were to transfer catch at the rate of once every two weeks (bi-monthly) for an average of six months per year, then these vessels would make a total of 2,280 transfers. Completing transfer logs at 10 minutes per log would require a maximum of 380 hours.

The amount of time to complete these logbooks is not necessarily an added cost to fishermen. The respondents likely keep these records anyway. Regardless, the total time costs of this alternative would be 51,160 hours.

Under Alternative 2, certain costs would be incurred by resource agencies in administering and enforcing the data collection program. NMFS estimates that the amount of time to board and inspect a catcher vessel, catcher/processor or mothership vessel, including their logbooks is about one hour per catcher vessel and two hours per catcher/processor or mothership. If 5% of the 972 vessels were boarded and inspected, about 49 hours would be required complete the inspections. If 50% of the 188 catcher/processor and two mothership vessels were boarded and inspected, then about 190 hours would also be required to inspect 95 vessels. Costs are those included in utilizing support platforms, e.g., U.S. Coast Guard vessels. No additional costs, however, are borne by agencies. Enforcement personnel are already hired to support the conservation and management roles of NMFS. U.S. Coast Guard vessels are in place to carry out search-and-rescue and fisheries enforcement missions off Alaska. Depending on the type of program instituted for obtaining and analyzing logbook information, certain costs would also be incurred by the NMFS.

- 4.4.3 Alternative 3: Require only catcher/processor and mothership vessels to maintain a comprehensive fishing logbook (including DCPL, fishing effort, and discard sections) and a transfer logbook. Other vessel categories would have no logbook requirements.

Costs that would be incurred by catcher/processor and mothership vessels are those that are associated with completing the entire fishing logbook and transfer logbook. Based on the NMFS data base on groundfish permits issued for 1987, there are 188 catcher/processor vessels and two mothership vessels, or 190 vessels that could complete the logbooks. The costs to vessel operators of complying with this information collection requirement are summarized above under Alternative 2. The maximum costs for the catcher/processor and mothership/processor fleet to comply with these new requirements are estimated to be 45,480 hours.

Under Alternative 3, certain costs would be incurred by resource agencies in administering and enforcing the data collection program. NMFS estimates that the amount of time to board and inspect catcher/processor and mothership/processor vessels, including their logbooks is about two hours. If 50% of the 188 catcher/processor and two mothership vessels were boarded and inspected, then about 190 hours would be required to inspect 95 vessels. Costs are those included in utilizing support platforms, e.g., U.S. Coast Guard vessels. No additional costs, however, are borne by agencies. Enforcement personnel are already hired to support the conservation and management roles of the National Marine Fisheries Service. U.S. Coast Guard vessels are in place to carry out search-and-rescue and fisheries enforcement missions off Alaska.

- 4.4.4 Alternative 4: Require catcher/processor and mothership vessels to maintain only the DCPL logbook section and the transfer logbook. The fishing effort and discard sections would be deleted from the fishing logbook.

Under Alternative 4 only the DCPL section of the fishing logbook and the transfer logbook would be maintained by the catcher/processor and mothership fleet. Based on the data discussed earlier, NMFS estimates that a maximum of 22,800 hours per year would be spent by the fleet in compliance with this requirement.

- 4.4.5 Alternative 5 (Preferred): Require domestic catcher/processor and mothership/processor vessels to augment the weekly catch report with product transfer information and require those vessels to maintain a cargo transfer/off-loading log.

This alternative would include only a requirement for maintenance of a transfer logbook and changes in the current weekly catch report and would only apply to the larger domestic catcher/processors and mothership/processors. NMFS estimates that there are 25 such vessels currently with the number expected to increase to 50 by 1990. The analysis following Alternative 2 suggested that the cargo transfer/off-loading log would require an additional 380 hours to prepare and would lead to an additional 190 hours for enforcement personnel to inspect vessels. These calculations assumed 188 vessels would be affected.

Time would be required for preparation of the cargo transfer/off-loading log and additional time would be required for preparation of the augmented weekly catch report. Total time costs per vessel per year have been estimated at 13 hours [see analysis under Paperwork Reduction Act (SF38I)]. If this time is monetized at an opportunity cost of \$15 per hour, total time costs are \$195 per vessel per year.

Given that 25 vessels will be affected in 1988 and that as many as 50 vessels will be affected in 1990, an increase in total reporting costs for domestic catcher/processors and mothership/processors of 325-650 hours or \$4,875-\$9,750 is expected. Additionally, total inspection time would be 25 hours (see Alternative 2).

Given the lessened reporting requirements of Alternative 5 with respect to the other alternatives (other than the status quo), the cost and administrative burden should be least among the proposed alternatives to the status quo. Analysis of Alternative 2 indicates, because fishermen already fill out some kind of logbook, and because enforcement costs are fixed, little expected change in out-of-pocket cost relative to the status quo.

5.0 EFFECTS ON ENDANGERED SPECIES AND ON THE ALASKA COASTAL ZONE

None of the alternatives would constitute actions that "may affect" endangered species or their habitat within the meaning of the regulations implementing Section 7 of the Endangered Species Act of 1973. Thus, consultation procedures under Section 7 on the final actions and their alternatives will not be necessary.

Also, for the reasons discussed above, each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Zone Management Program within the meaning of Section 307(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

6.0 OTHER EXECUTIVE ORDER 12291 REQUIREMENTS

Executive Order 12291 requires that the following three issues be considered:

- (a) Will the Amendment have an annual effect on the economy of \$100 million or more?
- (b) Will the Amendment lead to an increase in the costs or prices for consumers, individual industries, Federal, State, or local government agencies or geographic regions?
- (c) Will the Amendment have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S. based enterprises to compete with foreign enterprises in domestic or export markets?

Regulations do impose costs and cause redistribution of costs and benefits. If the proposed regulations are implemented to the extent anticipated, these costs are not expected to be significant relative to total operational costs.

These amendments should not have an annual effect of \$100 million, since although the total value of the domestic catch of all groundfish species is about \$100 million, these amendments are not expected to alter the amount or distribution of this catch.

The amendment will not have significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S. based enterprises to compete with foreign enterprises in domestic or export markets.

The amendment should not lead to a substantial increase in the price paid by consumers, local governments, or geographic regions since no significant quantity changes are expected in the groundfish markets. Where more enforcement and management effort are required, the cost to state and federal fishery management agencies will increase.

7.0 IMPACT OF THE AMENDMENT RELATIVE TO THE REGULATORY FLEXIBILITY ACT

The Regulatory Flexibility Act requires examination of the impacts on small businesses, small organizations, and small jurisdictions. Currently, a total of 1,296 vessels may fish groundfish off the coast of Alaska, based on federal groundfish permits.

On the basis of the IRFA as part of the Regulatory Impact Review it has been concluded that this action would have significant effects on small entities.

The current reporting requirements for domestic catcher/processors and mothership/processors would be augmented under Amendments 16 and 11a. As estimated in Chapter 4 of this EA/RIR/IRFA and in the analysis required under the Paperwork Reduction Act (SF83I) (in separate mailing) the preferred alternative would result in an additional 4.3 hours per vessel per year for each of (1) maintaining the transfer logbook, (2) reporting product weight and the number of cartons transferred or off-loaded, and (3) reporting additional information in the "catch/receipt and product transfer report". The total time cost of 13 hours per year, when monetized at an opportunity cost of \$15 per hour, is \$195 per vessel per year.

The augmented reporting requirements are expected to apply to 25 vessels in 1988 and to as many as 50 vessels by the year 1990, implying an increase of total reporting costs from 325-650 hours or from \$4,875-\$9,750.

The preferred alternative is the minimal cost alternative of the four suggested alternatives to status quo and is preferred to the status quo in a benefit sense because of the likely reduction in the underreporting of the harvest of the target species and, hence, the overharvesting of those species.

8.0 FINDINGS OF NO SIGNIFICANT ENVIRONMENTAL IMPACT

For the reasons discussed above, neither implementation of the status quo nor any of the reasonable alternatives to that action would significantly affect the quality of the human environment, and the preparation of an environmental impact statement on the final action is not required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.

Date _____

9.0 COORDINATION WITH OTHERS

The Gulf of Alaska and Bering Sea Groundfish Plan Teams consulted extensively with representatives of the Alaska Department of Fish and Game, National Marine Fisheries Service, members of the Scientific and Statistical Committee and Advisory Panel of the Council, and members of the academic and industrial community. Lew Queirollo, Regional Economist, NMFS, and Grant Thompson, Northwest and Alaska Fishery Center, provided professional input and advice.

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11.0 REFERENCES

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12.0 CHANGES TO THE GULF OF ALASKA GROUND FISH FMP

12.1 Summary

Amendment 16 will make the following changes to the FMP:

- (a) Revise the definition of "prohibited species".
- (b) Update the plan's descriptive sections, reorganize chapters, and incorporate Council policy as directed.
- (c) Augment the current domestic catcher/processor and mothership/processor reporting requirements with at-sea transfer information and modify the weekly catch reporting requirements.

Since this amendment includes a complete update of descriptive sections and reorganizes all former chapters, the resulting product is a plan that is easier to read and use, and will allow more efficient updating in the future.

12.2 Changes to Relevant Sections of the FMP

- A. In the summary entitled "History of Amendments", page S-5, make the following changes and additions:

Amendment 15 - to "Effective," add the date "4/8/87."

Add to the summary:

Amendment 16 - (Effective)

Revised the definition of "prohibited species"; updated the plan's descriptive sections, reorganized chapters, and incorporated Council policy as directed; augmented the current domestic catcher/processor and mothership/processor reporting requirements with at-sea transfer information and changes to the weekly catch reporting requirements.

- B. For Sections 1.0 through 11.2, delete, and replace with the updated and reorganized text as outlined below:

1.0 INTRODUCTION

2.0 GOALS AND OBJECTIVES

2.1 Goals and Objectives for Management of Gulf Groundfish Fisheries

2.2 Operational Definitions of Terms

3.0 AREAS AND STOCKS INVOLVED

3.1 Species Managed by this Plan

4.0 MANAGEMENT MEASURES

- 4.1 General Information
- 4.2 Framework Measures
 - 4.2.1 Setting harvest levels^{1/}
 - 4.2.2 Apportionment of harvest within DAH and TALFF^{2/}
 - 4.2.3 Prohibited species catch^{3/} limits and adjustments to control halibut bycatch^{3/}
 - 4.2.4 Inseason adjustment of time and area^{1/}
- 4.3 Conventional Measures
 - 4.3.1 Domestic
 - 4.3.1.1 Permits
 - 4.3.1.2 Catch restrictions
 - 4.3.1.3 Gear restrictions
 - 4.3.1.4 Reporting requirements
 - 4.3.1.5 Gear allocations
 - 4.3.2 Foreign
 - 4.3.2.1 Permits
 - 4.3.2.2 Catch and gear restrictions
 - 4.3.3 Generic
 - 4.3.3.1 Observers
 - 4.3.3.2 Habitat protection
- 4.4 Other Measures
 - 4.4.1 Access limitation
 - 4.4.2 Size limits

5.0 APPENDICES

- 5.1 Biological and Environmental Characteristics of the Resource
- 5.2 Description of the Fishery
- 5.3 Socioeconomic Characteristics of the Resource
- 5.4 History of Management
- 5.5 Interaction Between and Among User Groups
- 5.6 Relationship of this Management Plan to Existing Laws and Policies
- 5.7 Enforcement Requirements
- 5.8 Financing Requirements
- 5.9 References

C. For Section 4.3.1.4 add the following paragraphs (3) and (4):

- (3) Catch/receipt and product transfer report. Operators of catcher/processor and mothership/processor vessels must submit a weekly catch/receipt and product transfer report. This report will be required after notification of starting fishing by a vessel and continuing until that vessel's entire catch or cargo of fish has been off-loaded for each weekly period, Sunday through Saturday, or for each portion of such a period. This report must be sent to the

^{1/} Implemented by Amendment 15.

^{2/} Implemented by Amendment 11.

^{3/} Implemented by Amendment 14.

Regional Director within one week of the end of the reporting period through such means as the Regional Director will prescribe by regulations and must contain the following information:

- (A) Name and radio call sign of the vessel.
 - (B) Federal permit number for the Gulf of Alaska groundfish fisheries.
 - (C) Month and days fished or during which fish were received at sea.
 - (D) The estimated round weight of all fish caught or received at sea by that vessel during the reporting period by species or species group, rounded to the nearest one-tenth of a metric ton (0.1 mt), whether retained, discarded, or off-loaded.
 - (E) The number of cartons of product and the unit net weight, in kilograms or pounds, of each carton of processed fish by species or species group produced by that vessel during the reporting period.
 - (F) The area in which each species or species group was caught.
 - (G) If any species or species groups were caught in more than one area during a reporting period, the estimated round weight of each, rounded to the nearest 0.1 mt by area.
 - (H) The product weight, rounded to the nearest one-tenth of a metric ton (0.1 mt), and the number of cartons transferred or off-loaded by product type and by species or species group.
- (4) Cargo transfer/off-loading log. Operators of catcher/processor and mothership/processor vessels must record certain information in a separate transfer log. He must record, for each transfer or off-loading of any fishery product in the EEZ, and also quantities transferred or off-loaded outside the EEZ, within any states' territorial waters, or within the internal waters of any state, the following information within a time specified by regulations:
- (A) The time and date (GMT) and location (in geographic coordinates or if within a port, the name of the port) the transfer began and was completed.
 - (B) The product weight and product type, by species or species group of all fish products transferred or off-loaded rounded to the nearest tenth of a metric ton (0.1 mt).
 - (C) The name and permit number of vessel off-loading to or, if to a shoreside facility, the name of the commercial facility receiving the product.
 - (D) The intended port of destination of the receiving vessel if off-loaded to another vessel.

13.0 CHANGES TO THE BERING SEA AND ALEUTIAN ISLANDS GROUND FISH FMP

13.1 Summary

Amendment 11a will make the following change to the FMP:

Augment the current domestic catcher/processor and mothership/processor reporting requirements with at-sea transfer information and modify the weekly reporting requirements.

13.2 Changes to the Relevant Sections of the FMP

For Section 14.4.5.D add the following paragraphs (3) and (4):

- (3) Catch/receipt and product transfer report. Operators of catcher/processor and mothership/processor vessels must submit a weekly catch/receipt and product transfer report. This report will be required after notification of starting fishing by a vessel and continuing until that vessel's entire catch or cargo of fish has been off-loaded for each weekly period, Sunday through Saturday, or for each portion of such a period. This report must be sent to the Regional Director within one week of the end of the reporting period through such means as the Regional Director will prescribe by regulations and must contain the following information:
 - (A) Name and radio call sign of the vessel.
 - (B) Federal permit number for the Bering Sea and Aleutian Islands groundfish fisheries.
 - (C) Month and days fished or during which fish were received at sea.
 - (D) The estimated round weight of all fish caught or received at sea by that vessel during the reporting period by species or species group, rounded to the nearest one-tenth of a metric ton (0.1 mt), whether retained, discarded, or off-loaded.
 - (E) The number of cartons of product and the unit net weight, in kilograms or pounds, of each carton of processed fish by species or species group produced by that vessel during the reporting period.
 - (F) The area in which each species or species group was caught.
 - (G) If any species or species groups were caught in more than one area during a reporting period, the estimated round weight of each, rounded to the nearest 0.1 mt by area.
 - (H) The product weight, rounded to the nearest one-tenth of a metric ton (0.1 mt), and the number of cartons transferred or off-loaded by product type and by species or species group.

(4) Cargo transfer/off-loading log. Operators of catcher/processor and mothership/processor vessels must record certain information in a separate transfer log. He must record, for each transfer or off-loading of any fishery product in the EEZ, and also quantities transferred or off-loaded outside the EEZ, within any states' territorial waters, or within the internal waters of any state, the following information within a time specified by regulations:

(A) The time and date (GMT) and location (in geographic coordinates or if within a port, the name of the port) the transfer began and was completed.

(B) The product weight and product type, by species or species group of all fish products transferred or off-loaded rounded to the nearest tenth of a metric ton (0.1 mt).

(C) The name and permit number of vessel off-loading to or, if to a shoreside facility, the name of the commercial facility receiving the product.

(D) The intended port of destination of the receiving vessel if off-loaded to another vessel.

14.0 CHANGES TO THE GULF OF ALASKA REGULATIONS

14.1 Summary

The following draft regulations would implement the preferred amendment alternatives approved by the North Pacific Fishery Management Council (Council) September 24, 1987 for Amendment 16 to the Fishery Management Plan (FMP) for the Groundfish Fishery in the Gulf of Alaska. Final approval by the Secretary of Commerce would change current federal regulations implementing the FMP under 50 CFR 611 and 672 as indicated. After the Secretary receives - the Council's approved FMP amendment, analysis and draft proposed implementing regulations, the regulations will be published in the Federal Register as proposed rules with public comment invited. Pending Secretarial approval and after changes are made due to public comments, the proposed rules will be republished as final rules.

14.2 Changes to Relevant Regulations

14.2.1 Revise definition of "prohibited species".

Section 611.92(b)(1)

The term "prohibited species" means for purposes of this section: shrimps (Pandalidae); scallops (Pactinidae); snails (Gastropoda); Pacific herring (Clupea harengus pallasii); salmonids (Salmonidae); Pacific halibut (Hippoglossus stenolepis); king crab (Paralithodes spp. and Lithodes spp.); Tanner crab (Chionoecetes sp.); Dungeness crab (Cancer magister); corals (Coelenterata); surf clam (Spisula polynyma); horsehair crab (Erimacrus isenbeckii); and lyre crab (Hyas lyratus spp.). Except to the extent that their harvest is authorized under other applicable law, the catch or receipt of these species must be minimized, and if caught or received, they must be returned to the sea immediately in accordance with Section 611.11 of the Part. Records must be maintained as required by Section 611.9, 611.90(e)(2), and 611.92 of this Part.

Section 611.93(c)(1)

TACs TALFF, and PSC Limits. (i) See 50 CFR Part 672, Subpart B, for procedures to determine total allowable catch (TAC), domestic annual processing (DAP), joint venture processing (JVP), total allowable level of foreign fishing (TALFF), and prohibited species catch (PSC) limits. Species listed in paragraph (b)(1) and Table 1 of this section as "prohibited species" or species for which the TALFF is zero, including species for which a PSC limit has been specified, shall be treated in the same manner as prohibited species under Section 611.11 of this Part.

Table 1

In Table 1, change column heading "Unallocated Species" to "Prohibited Species".

Section 672.3(a)

Federal law. For regulations governing foreign fishing for groundfish in the Gulf of Alaska, see 50 CFR Section 611.92; for those governing foreign fishing for groundfish in the Bering Sea, see 50 CFR Section 611.93. For regulations governing fishing by vessels of the United States for groundfish in the Bering Sea, see 50 CFR Part 675; for those governing salmon fishing off Alaska, see 50 CFR Part 674; for those governing permits and certificates of inclusion for the taking of marine mammals, see 50 CFR Section 216.24. For regulations governing fishing by vessels of the United States for halibut, see the regulations of the International Pacific Halibut Commission at 50 CFR Part 301.

Section 672.20(e)(1)

Prohibited species, for the purpose of this Part, means any of the species of salmon (Onocorhynchus spp.), steelhead trout (Salmo gairdneri), Pacific halibut (Hippoglossus stenolepis), Pacific herring (Clupea harengus pallasii), king crab (Paralithodes spp. and Lithodes spp.), and Tanner crab (Chionoecetes spp.) (listed as prohibited species in Table 1 of this Part) caught by a vessel regulated under this Part while fishing for groundfish in the Gulf of Alaska regulatory area, unless retention is authorized by other applicable law, including the regulations of the International Pacific Halibut Commission.

[Subparagraphs (1)(i), (1)(ii), and (1)(iii) are deleted.]

14.2.2 Update and rewrite portions of the Plan.

Update Descriptive Sections:

No implementing regulations are necessary.

Revise Species Categories:

Section 611.92(b)(2)

"Target species" are groundfish species and species groups of species that are commercially important and are generally targeted upon by the groundfish fishery. They include pollock (Theragra chalcogrammas); Pacific cod (Gadus macrocephalus); flounders (pleuronectidae, but not including Hippoglossus stenolepis); sablefish (Anoplopoma fimbria); and rockfish (all fish of the genus Sebastes and Sebastolobus). Sufficient data on each species or group of species exist for it to be managed separately from the others. Target species may be managed separately by species or by species group. Rockfish may also be managed by assemblages based upon habitat, including the "slope", the "shelf pelagic", and the "shelf demersal" assemblages. Records of the catch of each target species or group of species must be kept.

Section 611.92(b)(3)

"Other species" are species that currently have only slight economic value and are not generally targeted upon, but which are significant components of the ecosystem or have economic potential. These species include Atka mackerel, squid, sculpins, sharks, skates, eulachon, smelts, capelin, and octopus. The TAC for these species as a category is set at 5 percent of the combined TACs of the target species. Records of the catch of "other species" must be kept.

Table 1

In Table 1, the following species and species groups are designated as "Target Species": pollock, Pacific cod, flounders, sablefish, and rockfish (including the "slope assemblage", the "shelf demersal assemblage", the "shelf pelagic assemblage", and "thornyhead rockfish").

The following species and species groups are designated as "other species": Atka mackerel, squid, sculpins, sharks, skates, eulachon, smelts, capelin, and octopus.

Section 672.2 (Definitions)

"Target species" are groundfish species and species groups of species that are commercially important and are generally targeted upon by the groundfish fishery. They include pollock (Theregra chalcogrammas); Pacific cod (Gadus macrocephalus); flounders (pleuronectidae, but not including Hippoglossus stenolepis); sablefish (Anoplopoma fimbria); and rockfish (all fish of the genus Sebastes and Sebastolobus). Sufficient data on each species or group of species exist for it to be managed separately from the others. Target species may be managed separately by species or by species group. Rockfish may also be managed collectively either by habitat assemblages, including the "slope", the "shelf pelagic", and the "shelf demersal" assemblages, or by species group. Records of catch of this category must be maintained.

"Other species" are groundfish species and/or species groups which currently are of only slight economic importance or contain economically valuable species, but insufficient data exists to allow separate management. These species include Atka mackerel, squid, sculpins, sharks, skates, eulachon, smelts, capelin, and octopus. The TAC for these species as a category is set at 5 percent of the combined TACs of the target species. Records of catch of this category as a whole must be maintained.

"Nonspecified species" include all fish other than those specifically listed in this Part as "target species", "other species", and "prohibited species". It is thus a residual category of species of no current or foreseeable economic value or ecological importance which are taken by the groundfish fishery as a accidental bycatch and are in no apparent danger of depletion.

"Slope assemblage" includes the following species of rockfish: aurora rockfish (S. aurora); blackgill rockfish (S. melanostomus); chilipepper rockfish (S. goodei); darkblotch rockfish (S. crameri); greenstriped rockfish (S. elongatus); harlequin rockfish (S. variegatus); northern rockfish (S. polyspinus); pacific ocean perch (S. alutus); pygmy rockfish (S. wilsoni); red banded rockfish (S. babcocki); roughey rockfish (S. aleutianus); sharpchin rockfish (S. zacentrus); shortbelly rockfish (S. jordani); shortraker rockfish (S. borealis); splitnose rockfish (S. diploproa); stripetail rockfish (S. saxicola); vermilion rockfish (S. miniatus); and yellowmouth rockfish (S. reedi).

"Shelf demersal assemblage" includes the following species of rockfish: bocaccio (S. paucispinus); canary rockfish (S. pinniger); china rockfish (S. nebulosus); copper rockfish (S. caurinus); quillback rockfish (S. maliger); redstripe rockfish (S. proriger); rosethorn rockfish (S. helvomaculatus); silvergray rockfish (S. brevispinus); tiger rockfish (S. nigrocinctus); and yelloweye rockfish (S. ruberrimus).

"Shelf pelagic assemblage" includes the following species of rockfish: black rockfish (S. melanops); blue rockfish (S. mystinus); dusky rockfish (S. ciliatus); widow rockfish (S. entomelas); and yellowtail rockfish (S. flavidus).

Replace "TQ" with "TAC":

Regulations at 50 CFR Section 611.93 and 50 CFR Part 672 would be amended to implement the revision.

Delete the Species-Specific Reserve for Sablefish and Rockfish:

Section 672.20(a)(2)

Total allowable catch. The Secretary, after consultation with the North Pacific Fishery Management Council (Council), shall specify the annual total allowable catch (TAC) for each calendar year for each target species and the "other species" category, and shall apportion the TACs among domestic annual processing (DAP), joint venture processing (JVP), total allowable level of foreign fishing (TALFF), and reserves. Except for sablefish and rockfish, reserves shall be 20 percent of the TAC of each species and species group. There shall be no reserves for sablefish and rockfish. The sum of the TACs specified must be within the OY range of 116,000 mt to 800,000 mt for target species and the "other species" category.

Change TQ to TAC and Change "Publication" to "filing with the Office of the Federal Register":

Section 672.20(c)(1)

(1) Notices of harvest limits and PSC limits. As soon as practicable after October 1, of each year, the Secretary, after consultation with the Council, will publish a notice in the Federal Register specifying preliminary annual TAC, DAP, JVP, TALFF, and reserves, and PSC amounts for each target species, "other species" category, and species fully utilized by the DAP fisheries. The preliminary specifications of DAP and JVP will be the amounts harvested during the previous year plus any additional amounts the Secretary finds will be harvested by the U.S. fishing industry. These additional amounts will reflect as accurately as possible the projected increases in U.S. processing and harvesting capacity and to the extent to which U.S. processing and harvesting will occur during the coming year. Public comment on these amounts will be accepted by the Secretary for a period of 30 days following filing of the notice with the Office of the Federal Register. In light of comments received, the Secretary will, after consultation with the Council, specify the final PSC limits and annual TAC for each target species and apportionments thereof among DAP, JVP, TALFF, and reserves. These final amounts will be published as a notice in the Federal Register on or about January 1 of each year. These amounts will replace the corresponding amounts for the previous year.

Augment the Current Catcher/Processor Weekly Catch Report by Adding At-sea Transfer Information:

Section 672.5

Catch/receipt and product transfer report. After notification of starting fishing by a vessel under paragraph (a)(3)(i) of this section, and continuing until that vessel's entire catch or cargo of fish has been off-loaded, the operator of that vessel must submit a weekly catch/receipt and product transfer report, including reports of zero tons caught or received, for each weekly period, Sunday through Saturday, GMT, or for each portion of such a period. The catch/receipt and product transfer report must be sent to the Regional Director within one week of the end of the reporting period through such means as the Regional Director will prescribe upon issuing that vessel's permit under Section 672.4 of this Part. This report must contain the following information:

- (A) Name and radio call sign of the vessel.
- (B) Federal permit number for the Gulf of Alaska groundfish fisheries.
- (C) Month and days fished or during which fish were received at sea.

(D) The estimated round weight of all fish caught or received at sea by that vessel during the reporting period by species or species group, rounded to the nearest one-tenth of a metric ton (0.1 mt), whether retained, discarded, or off-loaded.

(E) The number of cartons of product and the unit net weight, in kilograms or pounds, of each carton of processed fish by species or species group produced by that vessel during the reporting period.

(F) The area in which each species or species group was caught.

(G) If any species or species groups were caught in more than one area during a reporting period, the estimated round weight of each, rounded to the nearest 0.1 mt by area.

(H) The product weight, rounded to the nearest one-tenth of a metric ton (0.1 mt), and the number of cartons transferred or off-loaded by product type and by species or species group.

Add the Requirement for a Cargo Transfer/Off-loading Log:

Cargo transfer/off-loading log. For each transfer or off-loading of processed product, the operator of each fishing vessel must record, in a separate transfer log, each transfer or off-loading of any fishery product in the EEZ, and also quantities transferred or off-loaded outside the EEZ, within any states' territorial waters, or within the internal waters of any state, the following information within twelve hours of the completion of the transfer or off-loading:

(A) The time and date (GMT) and location (in geographic coordinates or if within a port, the name of the port) the transfer began and was completed.

(B) The product weight and product type, by species or species group of all fish products transferred or off-loaded, rounded to the nearest tenth of a metric ton (0.1 mt).

(C) The name and permit number of vessel off-loading to or, if to a shoreside facility, the name of the commercial facility receiving the product.

(D) The intended port of destination of the receiving vessel if off-loaded to another vessel.

15.0 CHANGES TO THE BERING SEA AND ALEUTIAN ISLANDS REGULATIONS

15.1 Summary

The following draft regulations would implement the preferred amendment alternative approved by the North Pacific Fishery Management Council (Council) September 24, 1987 for Amendment 11a to the Fishery Management Plan (FMP) for the Groundfish Fishery in the Bering Sea and Aleutian Islands Area. Final approval by the Secretary of Commerce would change current federal regulations implementing the FMP under 50 CFR 611 and 675 as indicated. After the Secretary receives the Council's approved FMP amendment, analysis and draft proposed implementing regulations, the regulations will be published in the Federal Register as proposed rules with public comment invited. Pending Secretarial approval and after changes are made due to public comments, the proposed rules will be republished as final rules.

15.2 Changes to the Relevant Regulations

Augment the Current Catcher/Processor Weekly Catch Report by Adding At-sea Transfer Information:

Section 672.5

Catch/receipt and product transfer report. After notification of starting fishing by a vessel under paragraph (a)(3)(i) of this section, and continuing until that vessel's entire catch or cargo of fish has been off-loaded, the operator of that vessel must submit a weekly catch/receipt and product transfer report, including reports of zero tons caught or received, for each weekly period, Sunday through Saturday, GMT, or for each portion of such a period. The catch/receipt and product transfer report must be sent to the Regional Director within one week of the end of the reporting period through such means as the Regional Director will prescribe upon issuing that vessel's permit under Section 672.4 of this Part. This report must contain the following information:

- (A) Name and radio call sign of the vessel.
- (B) Federal permit number for the Bering Sea and Aleutian Islands groundfish fisheries.
- (C) Month and days fished or during which fish were received at sea.
- (D) The estimated round weight of all fish caught or received at sea by that vessel during the reporting period by species or species group, rounded to the nearest one-tenth of a metric ton (0.1 mt), whether retained, discarded, or off-loaded.
- (E) The number of cartons of product and the unit net weight, in kilograms or pounds, of each carton of processed fish by species or species group produced by that vessel during the reporting period.

(F) The area in which each species or species group was caught.

(G) If any species or species groups were caught in more than one area during a reporting period, the estimated round weight of each, rounded to the nearest 0.1 mt by area.

(H) The product weight, rounded to the nearest one-tenth of a metric ton (0.1 mt), and the number of cartons transferred or off-loaded by product type and by species or species group.

Add the Requirement for a Cargo Transfer/Offloading Log:

Cargo transfer/off-loading log. For each transfer or off-loading of processed product, the operator of each fishing vessel must record, in a separate transfer log, each transfer or off-loading of any fishery product in the EEZ, and also quantities transferred or off-loaded outside the EEZ, within any states' territorial waters, or within the internal waters of any state, the following information within twelve hours of the completion of the transfer or off-loading:

(A) The time and date (GMT) and location (in geographic coordinates or if within a port, the name of the port) the transfer began and was completed.

(B) The product weight and product type, by species or species group of all fish products transferred or off-loaded, rounded to the nearest tenth of a metric ton (0.1 mt).

(C) The name and permit number of vessel off-loading to or, if to a shoreside facility, the name of the commercial facility receiving the product.

(D) The intended port of destination of the receiving vessel if off-loaded to another vessel.

14 December, 1987

MEMORANDUM FOR: F/CM2 - Donald J. Leedy

FROM: F/CM - Peter H. Fricke

SUBJECT: Review of Amendments 16 and 11a to Alaska Groundfish FMPs

I have reviewed both amendments as requested.

With regard to the substantive amendment increasing reporting requirements for catcher/processor and mothership processor vessels, there appears to be no social impact on the fisheries as a whole, and the probability of a better data-base far outweighs any minor inconvenience to those vessels (perhaps we should note that it is part of the cost of doing business?).

The amendment 16 up-date of the FMP and its appendices is lacking in its descriptions of the socioeconomic characteristics of the fishing industry, although the historical material is very useful and the amendment does cross-reference the community profiles. The section on subsistence is very poor and ignores the Alaska Department of Fish and Game's Division of Subsistence's data base on subsistence fishing for marine species. This needs to be corrected as soon as possible.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Washington, D.C. 20235

NOV 24 1987

MEMORANDUM FOR: Distribution*
FROM: *Donald J. Leedy*
F/CM2 - Donald J. Leedy
SUBJECT: Review of Final Amendment 16 and Amendment 11a
to Alaska Groundfish Plans

The North Pacific Fishery Management Council has prepared Amendment 16 to the Gulf of Alaska Groundfish Fishery Management Plan and Amendment 11a to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands.

Both Amendments would require catcher/processor and mothership processor vessels to maintain a transfer log and report information weekly about groundfish production, transfers, and off-loading of groundfish products. In addition, Amendment 16 updates the descriptive portions of the plan and redefines prohibited species for foreign and domestic fisheries.

Please provide your comments (including "no comment") by December 18. Call me at 673-5272, if you have any questions.

Attachment

*Distribution

F/EN - Schaefer, ~~XXXX~~
F/EN - Pallozzi
F/CM2 - Surdi
F/CM1 - Millikin
GCF - Cooney, Raymont
GCEL - Frailey
F/MB - Everett
F/TS2
F/PR2 - Karnella
F/PR3 - Gessner
F/RE3
F/S2 - Holliday
BF/EC - Cottingham
OGC - Malone, Moran
GC - McGovern
OMB - Griffin
N/ORM4 - Evans



